



AWS Databases





Today's Takeaways

- ▶ Introduction to Database
- ▶ Amazon RDS
- ▶ MySQL Workbench



1

Introduction to Database

Introduction to Database

What is Database?





Introduction to Database

Type of Database?

Relational/SQL

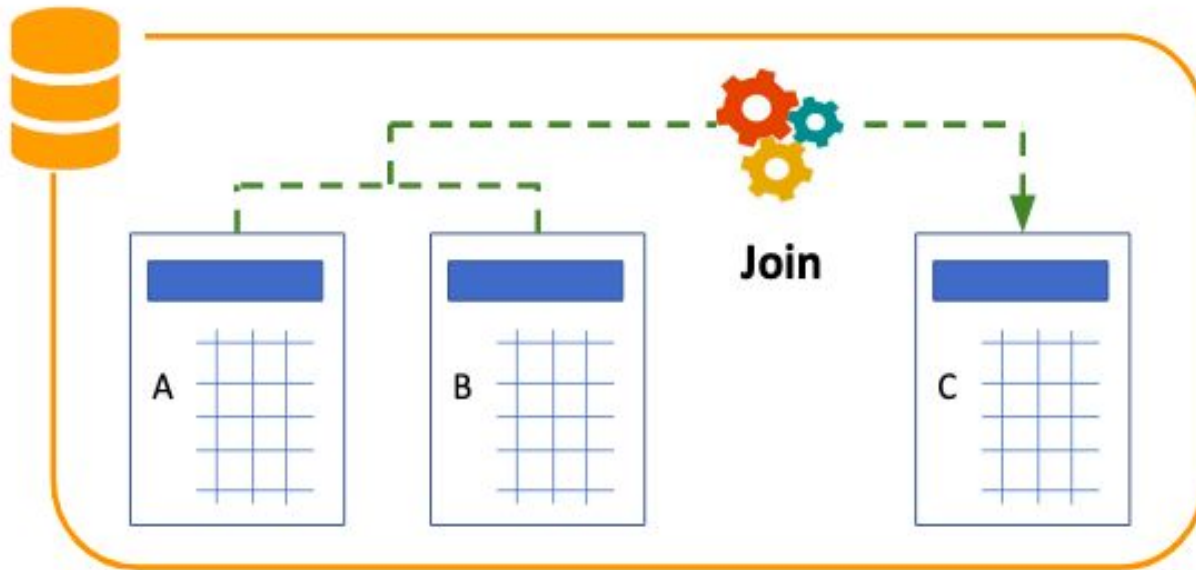
Non-Relational/NoSQL



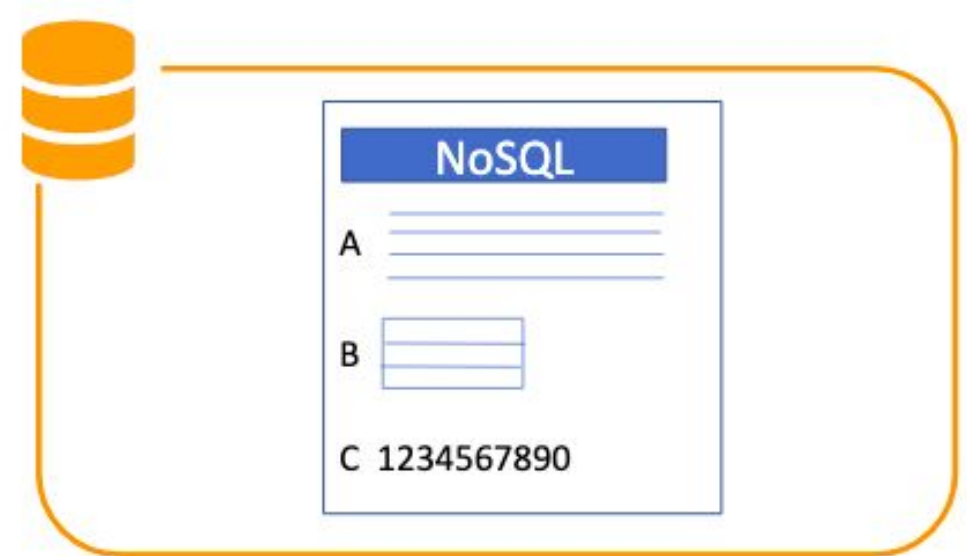
Introduction to Database

Type of Database?

Relational/SQL

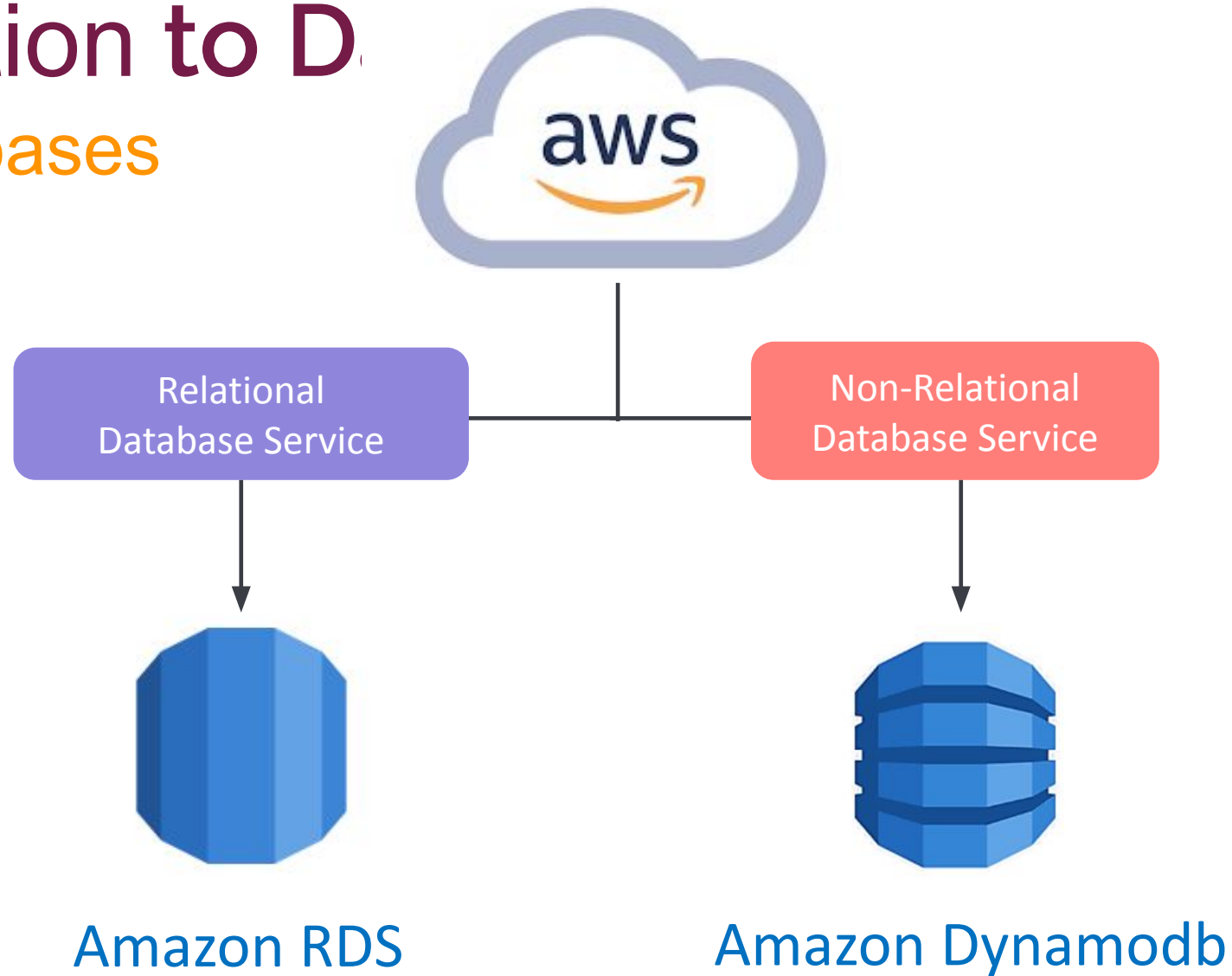


Non-Relational/NoSQL



Introduction to D.

AWS Databases





Introduction to Database

SQL vs. NoSQL ?

SQL	NoSQL
Relational	Non-Relational
Table-based	Document-based, key-value pairs, graph databases or wide-column stores
Predefined Schema	Dynamic Schema
Uses SQL	As the name suggest, it doesn't use SQL
Used for complex queries	Used for simple queries
Available for Join function	Not available for Join function

2

Amazon RDS

RDS

What is RDS?



Amazon RDS

RDS

Basic Components



Amazon RDS

PostgreSQL

MariaDB



Database Engines

db.t2.micro



DB Instance



Storage Disk



EC2

AMI



Red Hat



Amazon Linux



Instance Type

t2.micro

Storage Disk/
Root Volume



RDS

Database Engines

Amazon Aurora



ORACLE®

MariaDB



PostgreSQL



Microsoft SQL Server

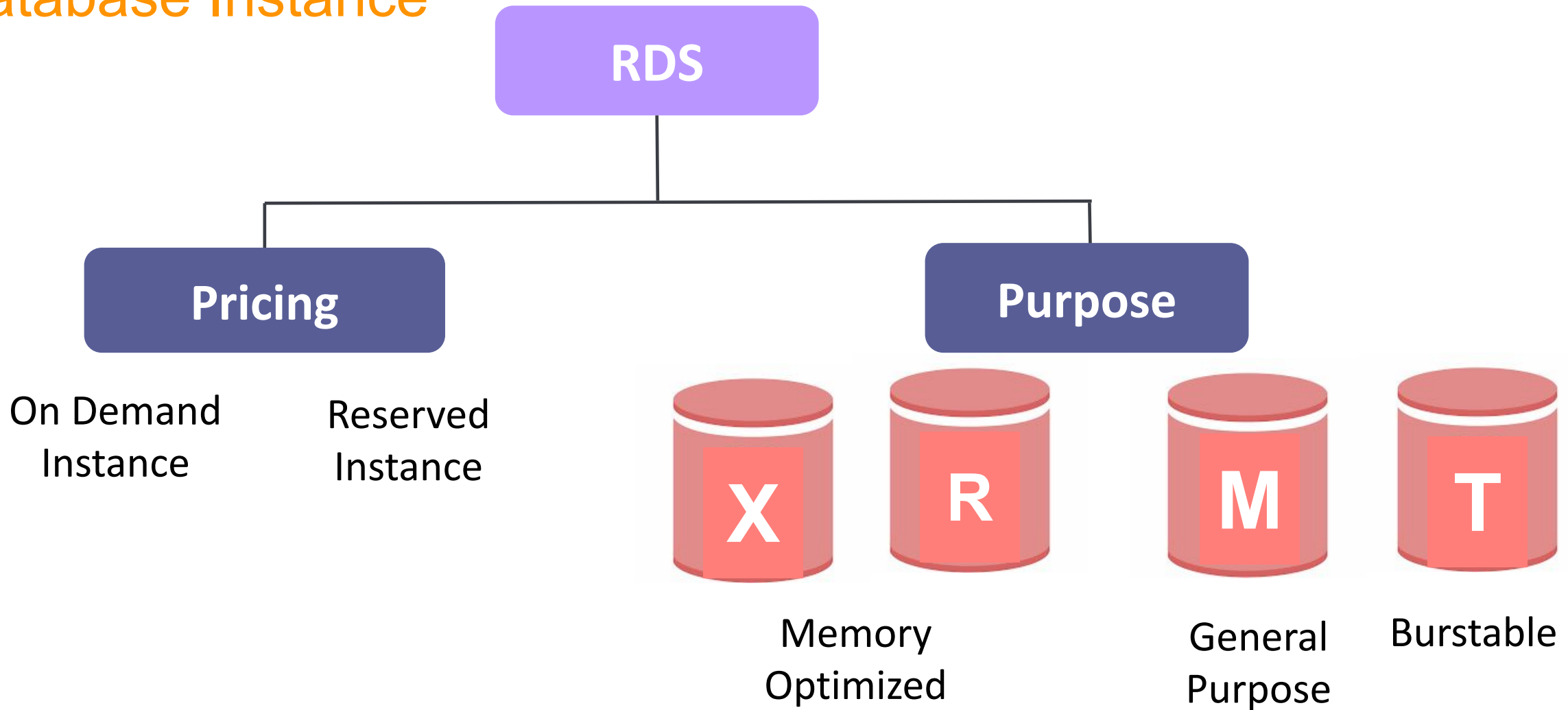


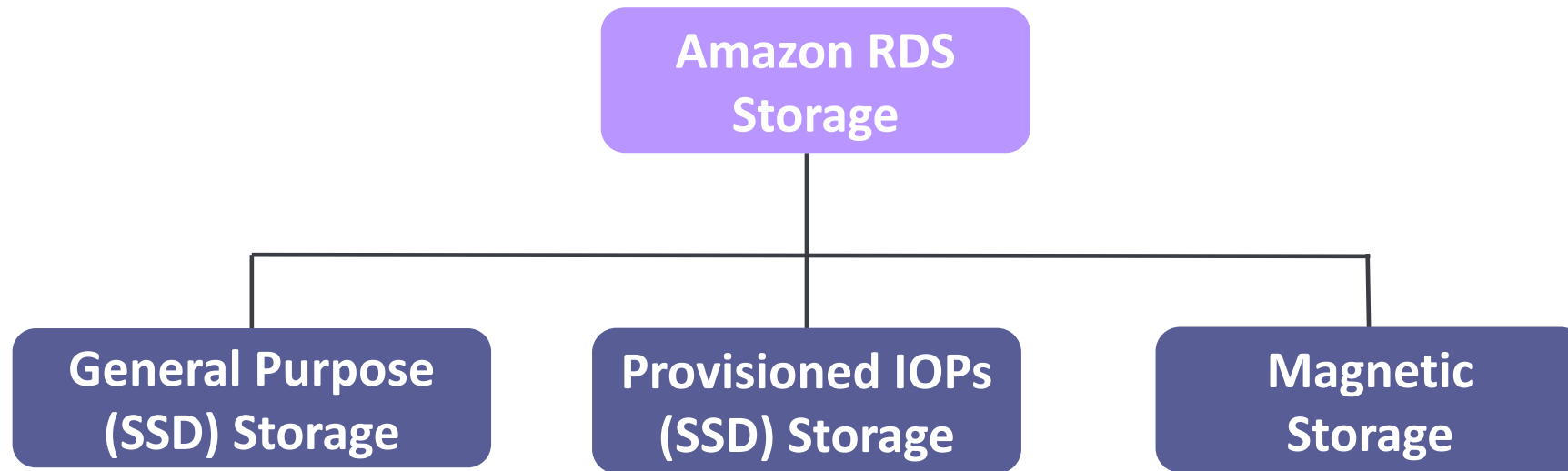
MySQL



RDS

Database Instance





Cost-effective

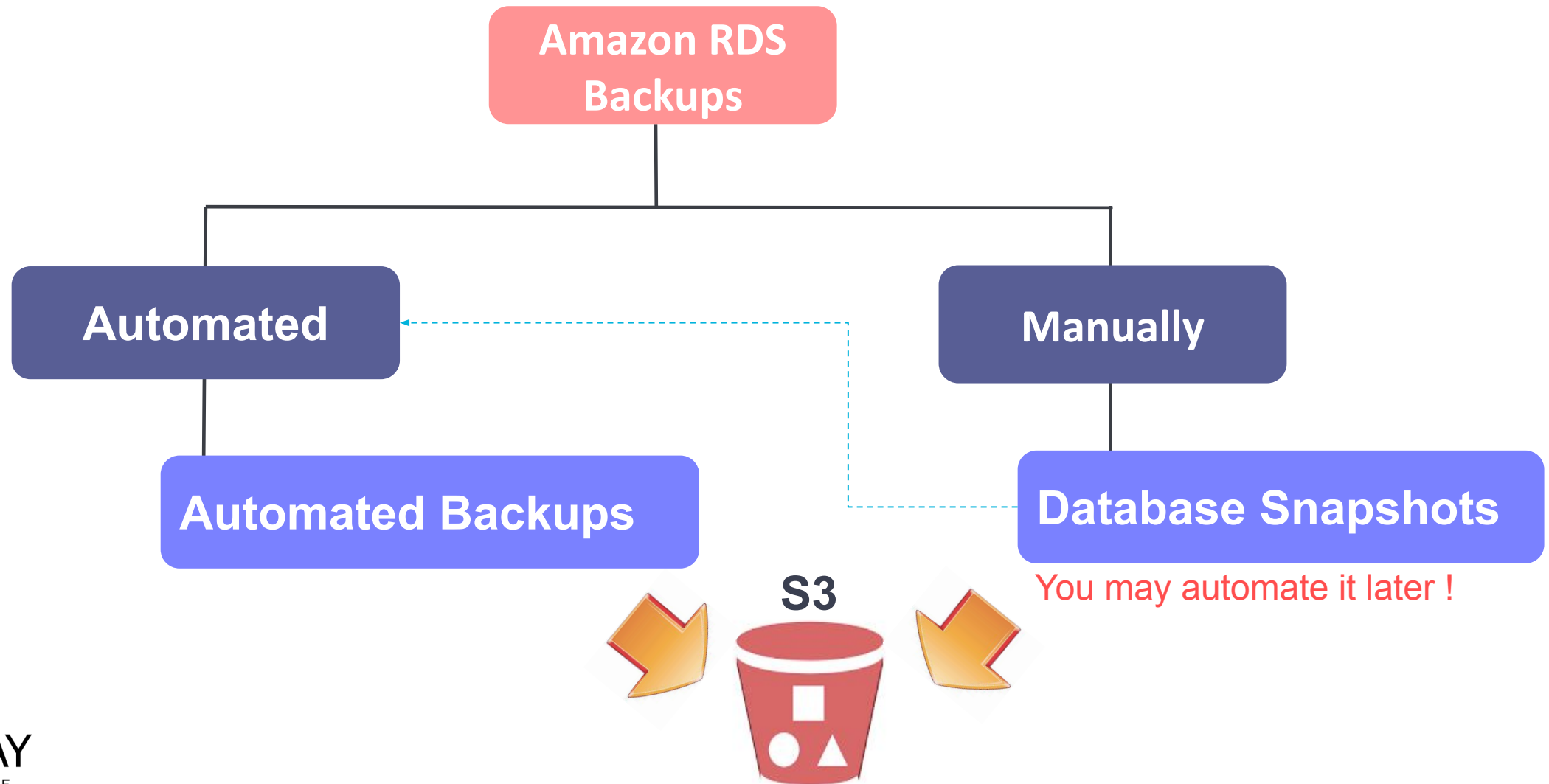
Fast and consistent I/O

Not recommended

There is an important factor in the databases as much as CPU and RAM power, which is the value of **IOPs of storage**

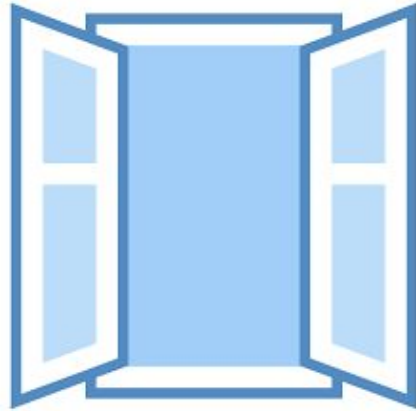


MySQL Workbench = Graphical tool for working with MySQL databases.



RDS

DB Instance Automated Backups



35 days



5 minutes

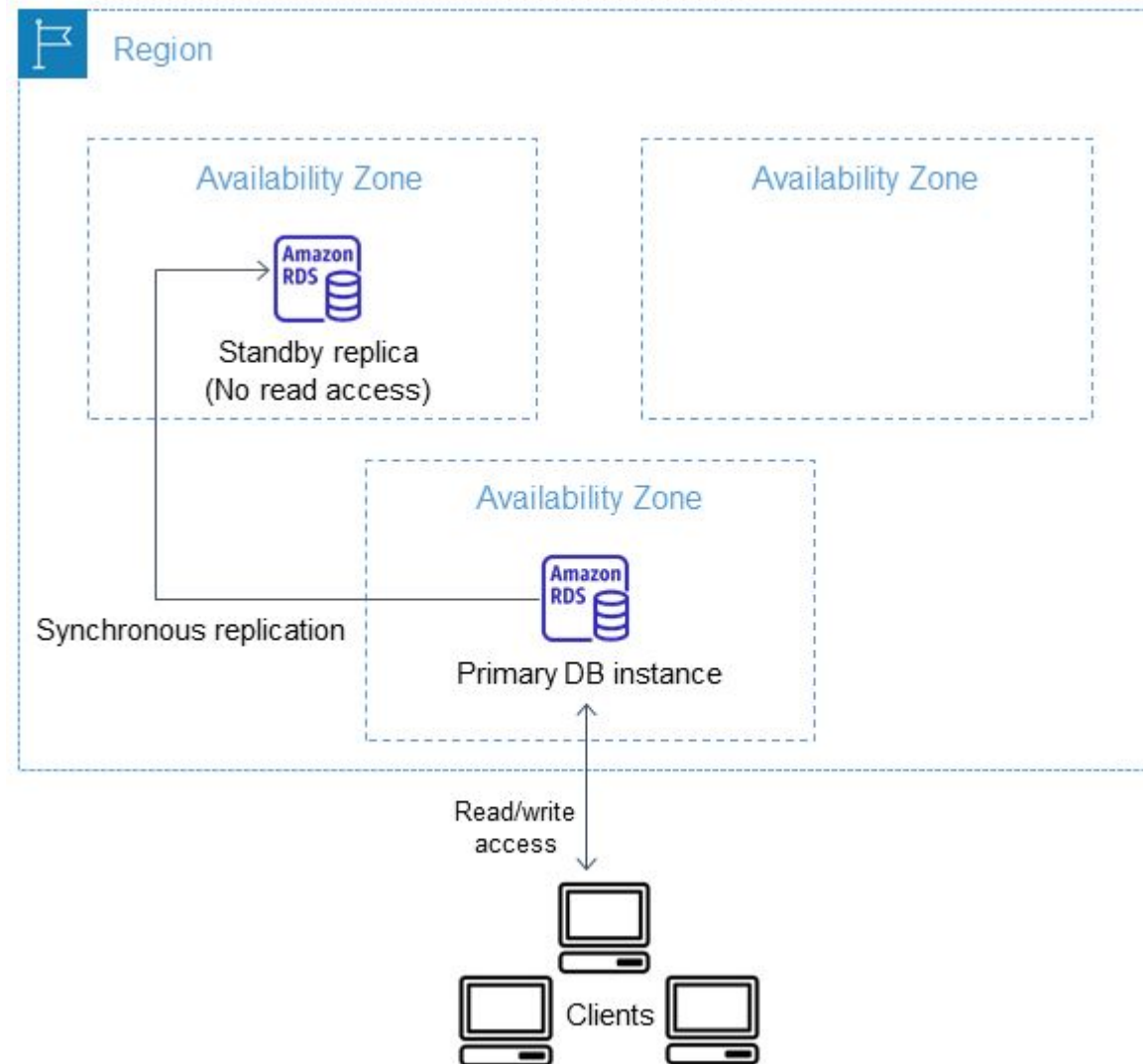
DB Instance Snapshot



RDS

RDS Multi-AZ Deployment

Multi-AZ DB
instance
deployments

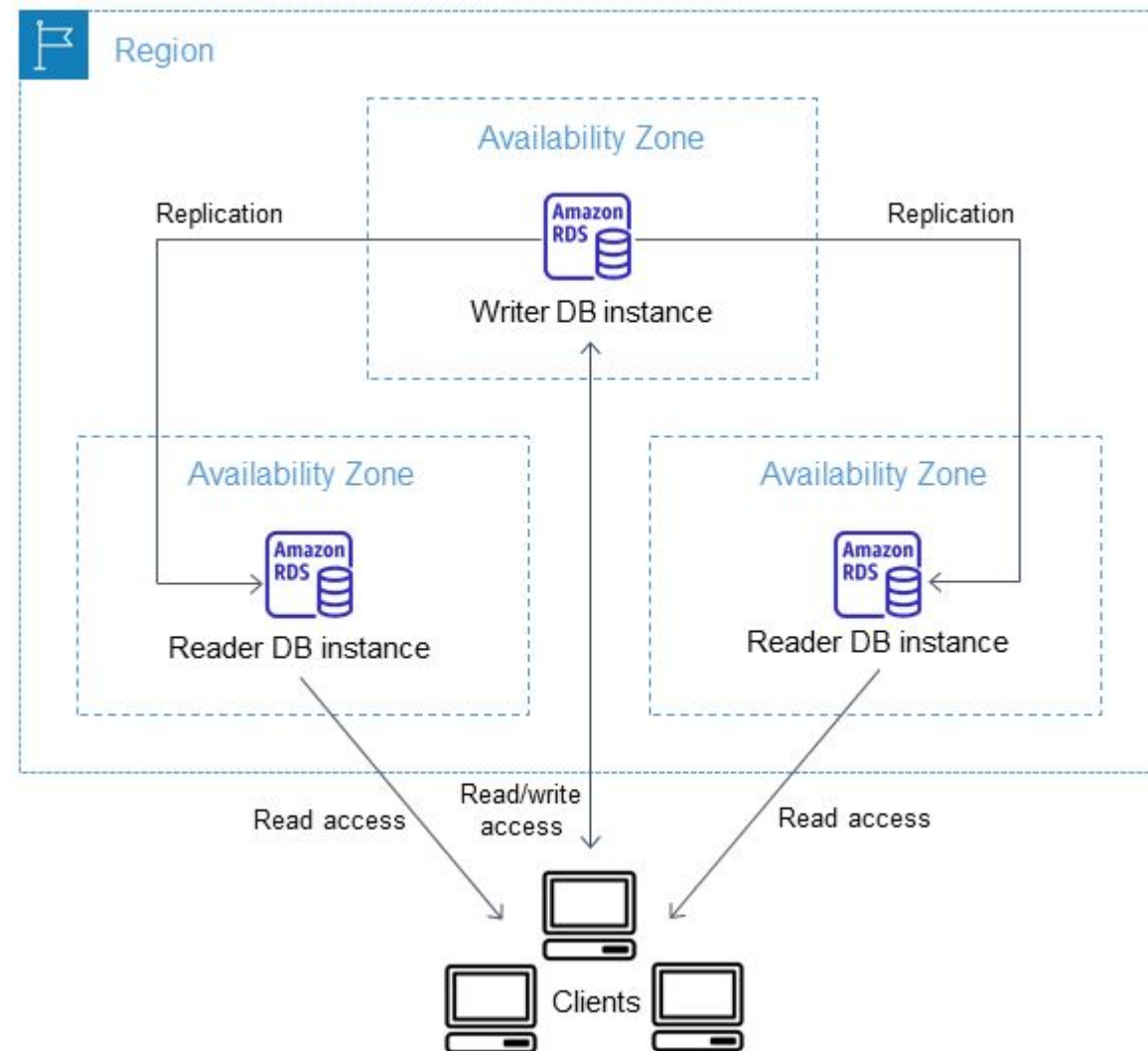


RDS

RDS Multi-AZ Deployment

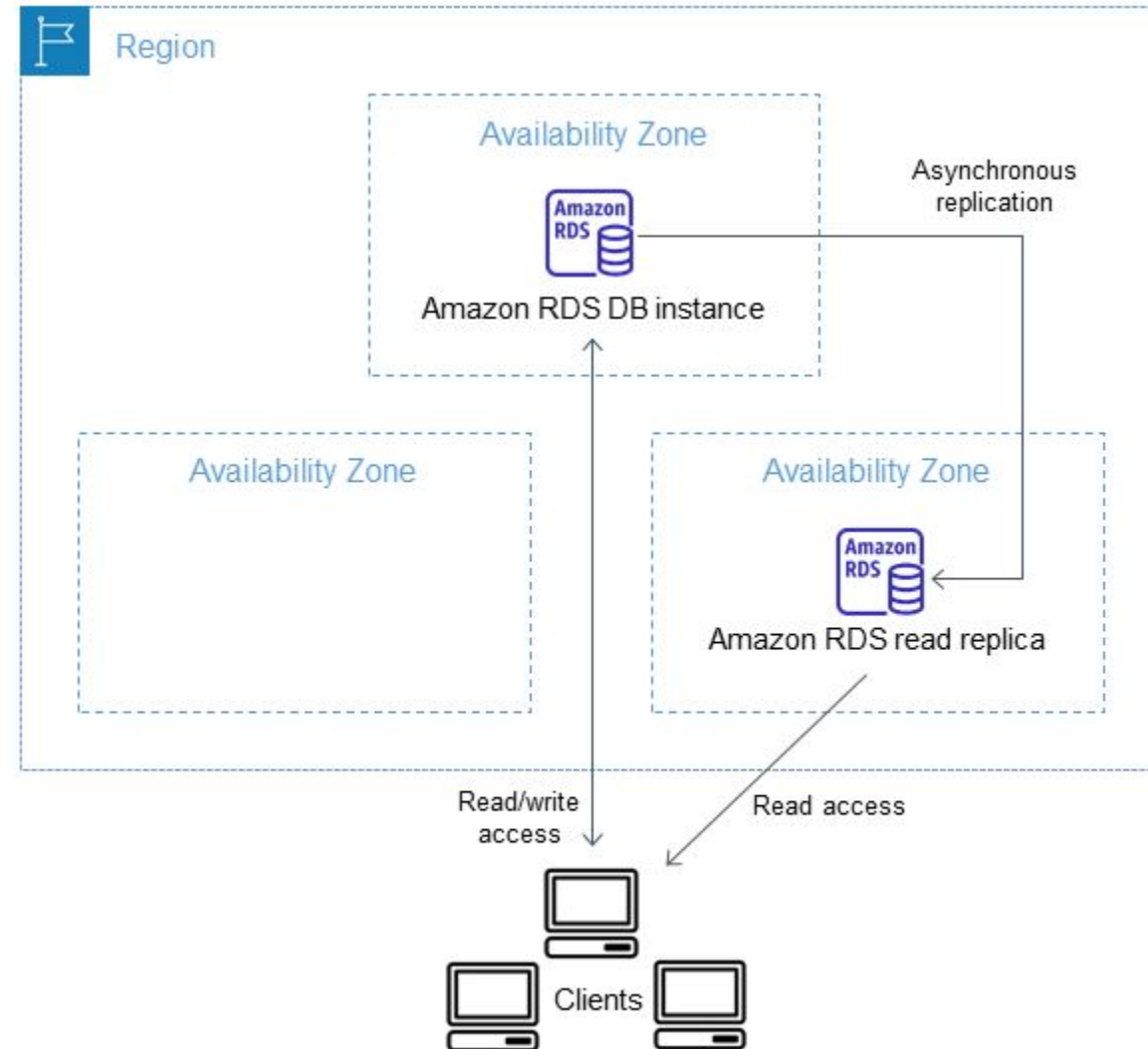
Multi-AZ DB cluster
deployments

Only for
PostgreSQL and MySQL



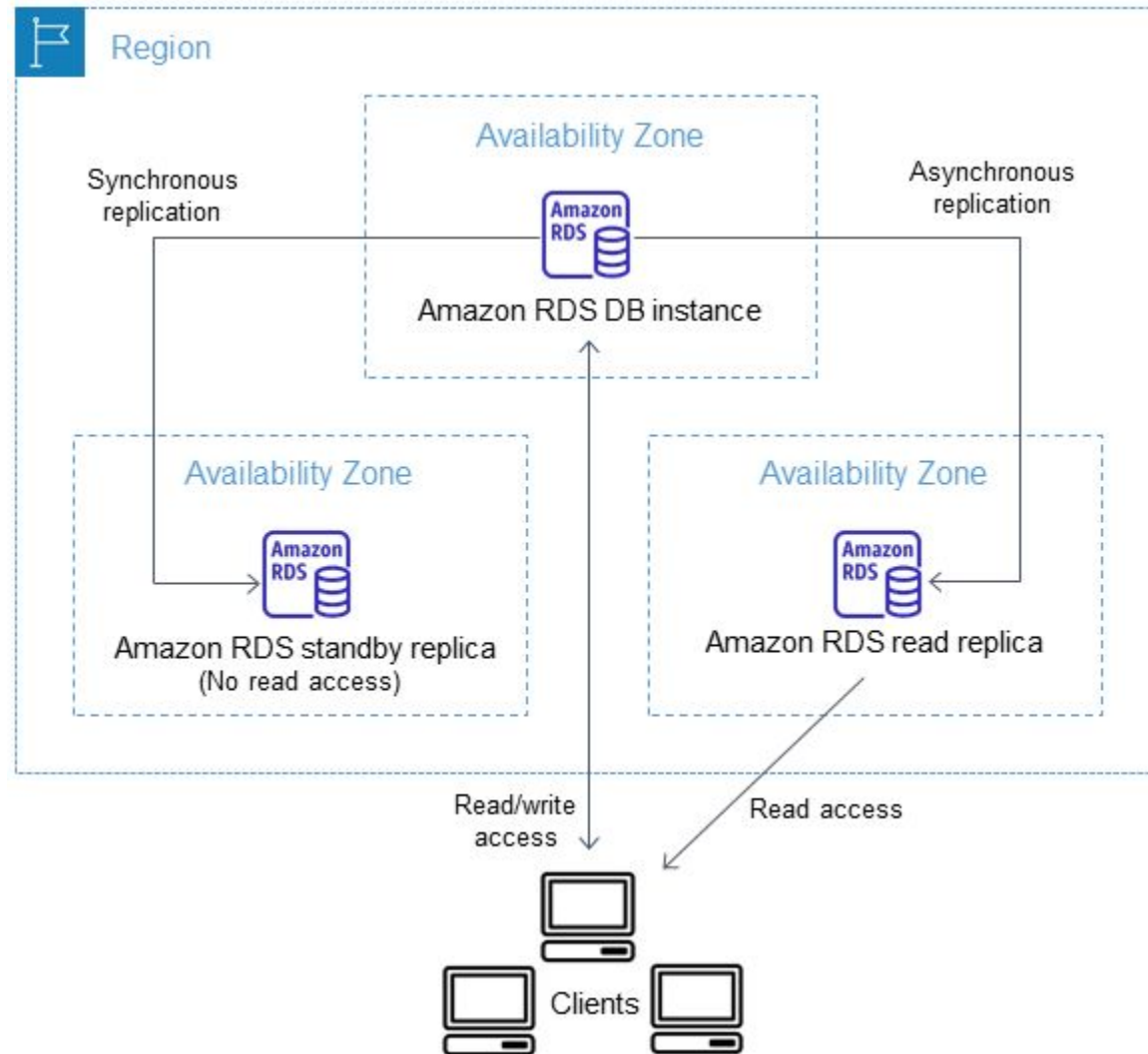
RDS

Read Replicas

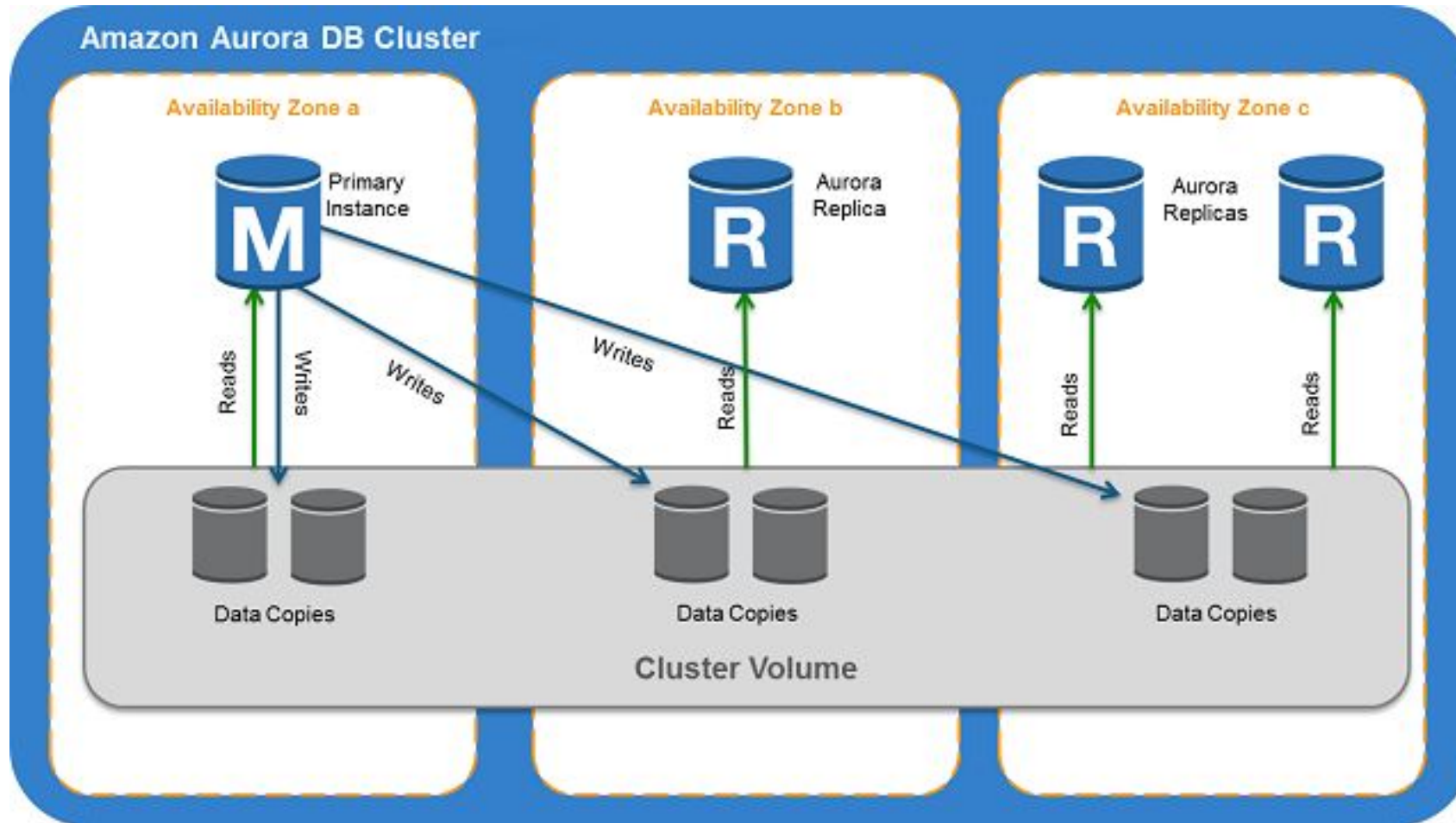


RDS

Read Replicas w/ Multi AZ Deployment



Aurora Multi-Master clusters



Let's get our hands dirty!

- Creating a RDS Instance
- Connecting DB via MySQL Workbench



THANKS!

Any questions?

